

# GEOGRAPHIC NEWS BULLETINS

*Published Weekly by*

## THE NATIONAL GEOGRAPHIC SOCIETY

(The National Geographic Society is a scientific and educational Society, wholly altruistic, incorporated under the Federal law as a non-commercial institution for the increase of geographic knowledge and its popular diffusion.)

General Headquarters, Washington, D. C.



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**PATHANS FROM AFGHANISTAN HAVE POPULATED PARTS OF NORTHWEST INDIA**  
(see Bulletin No. 1)

### Contents for Week of February 20, 1928.

Vol. VI.

No. 30.

1. New Airplane Route Will Penetrate to the Isolated Capital of Afghanistan.
2. Getting Acquainted With French Trains.
3. Why the Moon Raises Higher Tides Than the Sun.

Index to Bulletins and Illustrations,  
Vol. VI, February 28, 1927 through  
February 20, 1928.

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Note to Teachers: Because so many schools and public libraries preserve copies of the Geographic News Bulletins, teachers will find the INDEX to Volume VI, contained in this issue, of value. The INDEX covers 30 issues from February 28, 1927, through the current number. An application blank which teachers may use in applying for the bulletins follows Bulletin No. 2.

### HOW TEACHERS MAY OBTAIN THE BULLETINS

The Geographic News Bulletins are published weekly throughout the school year (thirty issues) and will be mailed to teachers for one year upon receipt of 25 cents (in stamps or money order). Entered as second-class matter, January 27, 1922, at the Post Office at Washington, D. C., under the Act of March 3, 1879. Acceptance for mailing at special rate of postage provided for in section 1103, Act of October 3, 1917, authorized February 9, 1922.

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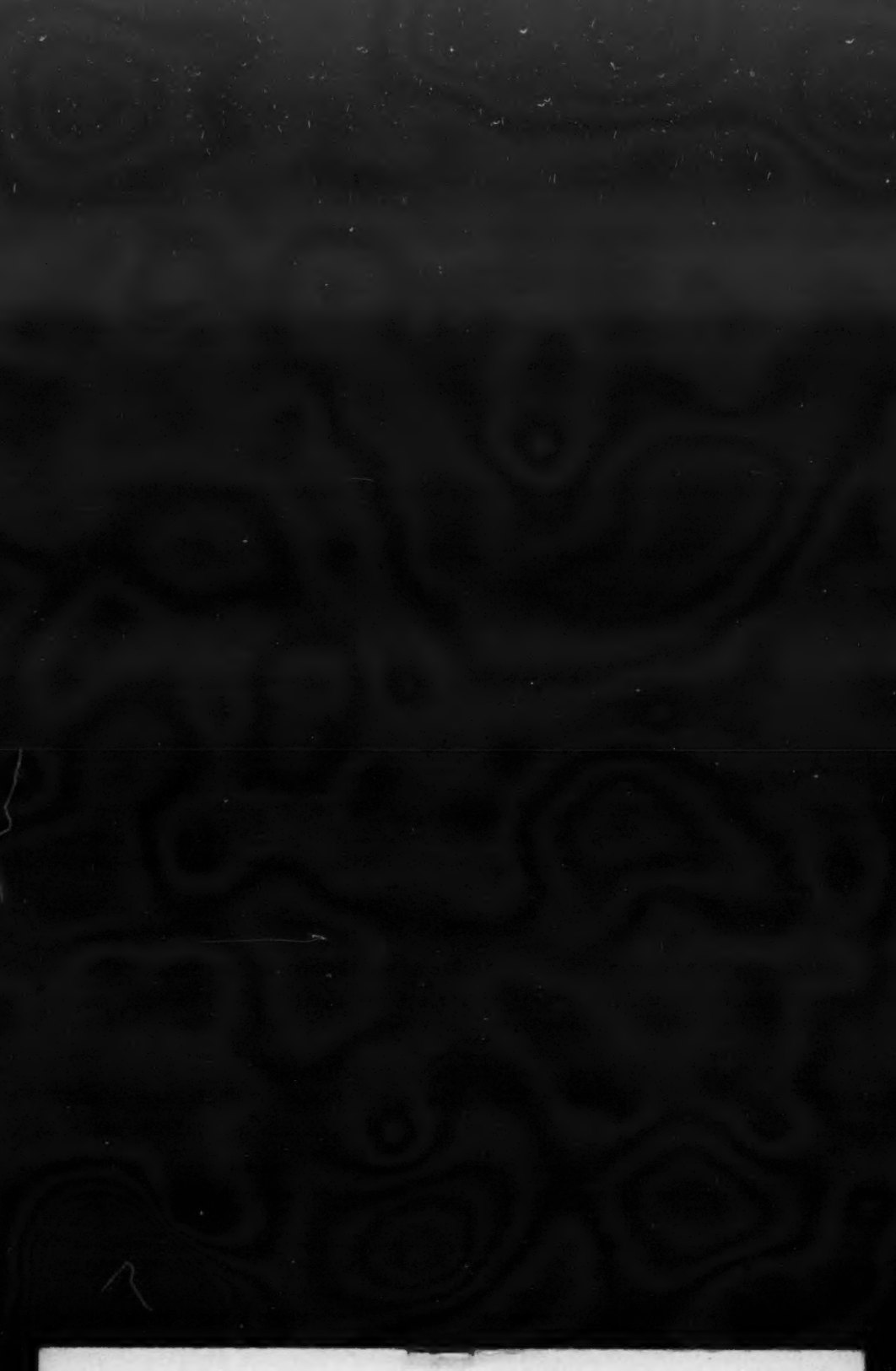
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### New Airplane Route Penetrates to the Isolated Capital of Afghanistan

**B**Y THE time the Amir of Afghanistan and his wife return from their tour of Europe, airplane service from the Russian border will have connected the Amir's isolated capital with the world.

Kabul, the capital of Afghanistan, was not planned to be inaccessible, like Katmandu in Nepal, nor is it forbidden like Lhasa in Tibet. Pianolas and phonographs give the ear an inkling of the home life of Afghanistan's capital, a home life which is screened from the eye by interminable mud walls. The extent of an Afghan's walls is the measure of his social station. The more prosperous he is the more wives he can afford; and the more wives he has the more walls he will need to guard them from the eyes of his neighbors.

Automobiles and even motorcycles, jockey camels and elephants on thoroughfares that are wide enough, telephone lines and electric lights add a touch of the modern. The predecessor of the present Amir had more than a hundred wives; the present ruler has one wife and half a hundred automobiles. When a western idea hits Kabul the impact often seems exaggerated. The story is told of one wealthy Kabulian who would have nothing less than a grand piano, which arrived minus a stool, so the purchaser had its legs cut off so he might play it while sitting on the floor in his accustomed cross-legged position.

Then, too, there are in Kabul machine shops, munitions works and factories for making soap and shoes and cloth, all built up under English supervision. Its tanneries, established through the cooperation of British experts, are sources of especial pride.

#### Afghans Keep Civilization at Arm's Length

The key to Kabul is the "splendid isolation" policy of Afghanistan's amirs. The Afghan is shrewd. He takes what he wants of civilization but keeps civilization at arm's length. He is a fervent Mohammedan, but realizes that there are more things in the world than Mohammed dreamed of. The Amir Habibullah summed up the Afghan philosophy of recent years when he proclaimed, "Knowing the Koran, you may learn what else you choose."

One political result of this policy was that Kabul, until 1922, had the one absolute reigning monarch whose word was unquestioned law among some 7,000,000 people. It is a tribute to the enlightenment, rather than to the curtailed powers of the present ruler, that men no longer are tied to the muzzle of cannon nor have their tongues cut out. There frequently was more irony than cruelty in Afghan punishments. One Amir of not so many years ago ordered three fingers cut off the hand of a man who had stolen three coins from a blind beggar. Upon another occasion he ordered that a baker, who was repeatedly guilty of selling short-weight loaves, be roasted alive in his own oven because there was so much spare room there. Yet the Afghan holds all life sacred to the extent that he will remove a flea from his person instead of killing it. A "swat the fly" campaign in Kabul would be impossible.

The absolute authority of the Amir often had a ridiculous side. One official English resident tells how an Amir was informed one day that the government warehouses were overstocked with astrakhan pelts. The ruler thought a bit

Bulletin No. 1, February 20, 1928 (over).



*Photograph by U. S. Army Air Service*  
**THE FAMOUS ARCH OF TRIUMPH IN PARIS BENEATH WHICH IS THE TOMB OF FRANCE'S UNKNOWN SOLDIER**

Travel by airplane has become increasingly popular in Europe. The extensive views to be seen from the air constitute one advantage of aerial travel. Shortly after the World War, a French flying ace flew a pursuit plane through this archway at a speed of 140 miles an hour. The clearance between his wing tips and the sides of the arch was less than six feet on either side (see Bulletin No. 2).

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### Getting Acquainted with French Trains

"PULLMAN" service and dining car service in France is different from Pullman service in the United States, as thousands of "first time over" tourists will discover this spring.

With baggage in place, the tourist, whether he lands at Cherbourg or Le Havre, will find it worth while to saunter along outside the Paris boat-train until the odor of cooking food and a sign "Wagon Restaurant" on a car side tells the location of the dining car. Near the steps the tourist will probably find an official busily tearing colored tickets from a pad and passing them to fellow travelers. The latter are making their seat reservations for luncheon, a custom which one soon wishes might be introduced into America.

### Steps to Passenger Coaches Challenge Athletes

In Europe there are no long lines of hungry passengers blocking dining-car corridors while they watch the fortunate diners, hoping each mouthful will be the last. Instead tickets are issued for the exact number of persons to fill the available seats, after which applicants must take tickets for a meal forty-five minutes later or earlier. Finding the reservation attendant early will give the traveler choice of the first, second, third or fourth "series" of tickets. The agent will visit the compartments later, to be sure, but by that time travelers may have no choice other than to eat what should be a mid-day meal at either ten o'clock or two.

While the tourist waits for the train to start he can observe French railway equipment. He has been struck already by the extremely awkward and steep steps that lead into the coaches. In America such steps would result in a succession of broken legs and necks and endless damage suits, but apparently they cause little inconvenience in France. It is astonishing how any but the most agile of youthful travelers manage to negotiate them.

The coaches on the trains which operate from the chief ports to Paris are now mostly of the corridor type, almost as long as the standard coaches in America, although they are not so high nor so heavy. The corridor extends down one side, while on the other side the space is divided into small compartments, seating six people each. The traveler has looked upon first class, perhaps, as promising a certain amount of luxury; but he is disappointed to find that first class, on boat-trains at least, is little better than the day-coach service in America. There is relative privacy, to be sure, since he has only five traveling companions, but three of these must ride backwards, sitting directly across in their rigid seats necessarily staring at the passengers opposite them. In the American day coach the seats at least all face forward.

### Horses Switch Freight Cars in French Railroad Yards

The locomotives are not vastly different from those in America except that most of them are somewhat smaller. One comes to think of these locomotives as much smaller than they are because of their shrill, piping little whistles, like those of steam-shovels in America. The tenders are piled high with large black bricks the size of paving blocks. They are called "briquettes," and from the



and then announced, "All my subjects who love me will wear black astrakhan hats." For days the guards had a busy time turning away from public buildings all persons who wore turbans.

#### **Taking of Census Disrupted Business**

Kabul has between 150,000 and 300,000 people. One can only guess at the population because the one effort at a census failed before the exclusiveness of the Afghan. Rather than tell their names and ages so many Kabul residents either left the city or hid away that business was disrupted and the census was abandoned.

Kabul's flat roof dwellings rise from the banks of the Kabul River nearly 7,000 feet above sea level. The peaks of the Hindu Kush jut into the skyline three times as high not far away. Hence its winters are cold and its summers mild. Its trade flows in three channels: Northward through the Hindu Kush into Central Asia; eastward into India through the Khaibar Pass, and toward Persia by way of Kandahar, to the southwest.

Note: For further information and illustrations see "Everyday Life in Afghanistan" in the National Geographic Magazine for January, 1921.

Bulletin No. 1, February 20, 1928.



*Photograph by P. D. Crawford*

#### **POST OFFICE ON THE ROAD TO KABUL**

Mail and freight go into Afghanistan from India by way of the famous Khaibar Pass. Caravans of camels and mules tediously travel through the dangerous gap under protection of a guard. Airplane service proposed by Russia will reach Kabul from the north. The Soviet has been extending airplane communication to its distant territories. The service to Samarkand will go on to Termez on the border and to Kabul.

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### Why the Moon Raises Higher Tides Than the Sun

**A**LTHOUGH the moon is the chief factor in creating tides, the sun also makes itself felt noticeably in piling up the ocean's waters.\*

But the sun is tremendously greater than the moon—more than 27 million times as large: Why does it play a subordinate part to the little moon in tide production?

Distance is one answer, but it is not the whole answer. If the sun were as close to the earth as the moon is, it would pull the earth and its waters some 27 million times as hard as the moon does. But, since distance is such a great reducer of gravitation, the sun's pull on the earth is roughly only 183 times that of the moon.

#### Sun Has Stronger Pull, but Moon Produces Tides

But the question persists: Why does the moon produce the higher tides when the sun pulls on the earth 183 times as strongly?

The total pull of a body on another, and its tide-producing force, are not the same. The tide on the earth results from the *difference* between the pulls on the center of the earth and on the near and far sides. These are the pulls that tend to separate the waters and the earth and, therefore, to pile the waters up. And it will be seen on close thought that two weak forces that are considerably different, operating one on the earth and one on the waters, can cause a greater separation than two very strong forces that are nearly equal.

Light and gravitation act somewhat alike in that each grows weaker as the source of light or gravitational pull is moved farther and farther away and that both grow weaker very rapidly. The *differences* in gravitational pull on which tides depend can be visualized, therefore, by an experiment with light.

Turn on an electric desk light or other single bulb and hold near it a sheet of ordinary white paper. Hold the paper with one edge toward the light and only 2 or 3 inches away and turn it very slightly so that the light shines along the sheet and illuminates its whole surface. There will be a noticeable difference between the brightness of the light at a point near the close edge and at a point near the far edge.

#### Moon's Effect Actually Two and One-Half Times That of Sun

Now hold the paper in the same way at a distance of 10 or 12 feet from an even brighter light, or hold it in the daytime at such a distance from a bright window. You know that there is still a difference in the degree of illumination progressing from the near edge to the far edge, but it is so very tiny that you cannot detect it.

The two points on which the sun pulls to make the near tide—the surface of the ocean nearest the moon and the earth's center—are 4,000 miles apart, and this 4,000 miles is a tiny fraction of the earth-to-sun distance, a little over 4/100,000. In the case of the moon this same 4,000 miles is a relatively large fraction of the earth-to-moon distance, 1666/100,000.

\*This is the third in a series of bulletins on tides. "The Pull of the Moon, a Force that Helped Flood London," was printed in the Geographic News Bulletins for February 6, and "Why There Are Tides on Both Sides of the Earth at the Same Time," February 13.



fires built of them pours a sooty, black smoke. In the outer railroad yards are huge artificial mountains of coal dust from which the blocks are pressed.

The coaches do not have automatic couplers of the American type, but are fitted with hand-operated devices in which the slack is adjusted by the turning of a large nut on steel threads. This arrangement is prized highly by Europeans who find the jerks of American couplers in starting and stopping most disconcerting. But the American cannot avoid thinking of toy trains fastened together by thumb-screws.

It is the little gondola freight cars that the tourist passes in the yards, when the train gets under way, that bring the keenest memory of toy train days, however. They look like slightly overgrown farm wagons with their wheels close together near the middle. The wagon illusion is heightened when one sees that much of the switching is accomplished by horses, usually in tandem, which have no difficulty in drawing these little vehicles and their loads.

#### **The Baggage Porters Wait Outside the Car Windows**

The windows of French passenger coaches appeal to many passengers as more convenient than those of American cars. They are large, and it does not require the strength of a prize fighter or a football hero to open them. Usually a reasonable tug will lower the large, single glass plate almost out of sight.

These windows, incidentally, figure largely in French travel. Most of the hand baggage moves in and out of them. When a train draws up to the platform of the terminal station, a long line of porters stands in readiness. The generally accepted method is to hand luggage through the windows, noting the badge number of the porter. A traveler grows to prefer this method to the tantalizingly slow procession down an American car aisle.

Bulletin No. 2, February 20, 1928.

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### **Form for Renewal of Bulletin Requests**

Many requests for the GEOGRAPHIC NEWS BULLETINS were made for the period ending with this issue. If you desire the Bulletins continued kindly notify The Society promptly. The attached form may be used:

School Service Department,  
National Geographic Society,  
Washington, D. C.

Kindly send.....copies of the GEOGRAPHIC NEWS BULLETINS for the school year beginning with the issue of....., for classroom use, to

Name .....

Address for sending Bulletins.....

City..... State.....

I am a teacher in.....school.....grade

Enclose 25 cents for each annual subscription.

# INDEX OF GEOGRAPHIC NEWS BULLETINS AND ILLUSTRATIONS

Covering Vol. VI, No. 1, February 28, 1927 through No. 30, February 20, 1928

## AFRICA

- General:** "Unmapped Regions of the Old World." (Nov. 7, 1927.)  
 "Where Men Wear Skirts." (Nov. 21, 1927.)  
**Egypt:** (Ill.) "De Lesseps Stands on an Ever-Lengthening Breakwater at Port Said." (April 4, 1927.)  
 "Port Fuad: A New City Christened by a King." (April 4, 1927.)  
**Gold Coast Colony:** (Ill.) "Cleaning Cacao Beans, the Raw Materials of Cocoa." (May 2, 1927.)  
 "Development Rapid in the 'Cacao Coast' of Africa." (May 2, 1927.)  
**Kenya Colony:** (Ill.) "Drying Sisal in Kenya Colony, Africa." (Feb. 28, 1927.)  
**Morocco:** (Ill.) "Bringing a Western Sewing Machine to the Harem: Casablanca." (May 9, 1927.)  
 "Casablanca: Again Prominent in Aviation News." (May 9, 1927.)  
 (Ill.) "Moorish and Spanish Architecture Has Become Popular in the United States." (Dec. 19, 1927.)  
 "A New Sultan Proclaimed in a New Morocco." (Dec. 19, 1927.)  
**Nigeria:** "The Ibos of Nigeria, Who Help Supply Us with Chocolate." (Jan. 23, 1928.)  
 "Northern Nigeria: Which Has Welcomed an Immigrant Nation of 30,000." (April 4, 1927.)  
 (Ill.) "A Tuscan Woman Sifting Flour in Rabat." (April 4, 1927.)  
**Rhodesia:** (Ill.) "Every Day is a School Holiday in Northern Rhodesia." (Nov. 28, 1927.)  
 "The Rhodesias Take a Leaf out of America's Book." (Nov. 28, 1927.)  
**Sierra Leone:** (Ill.) "An Oil Palm Cone, Source of an Ingredient of American Soap." (Jan. 2, 1928.)  
 "New Year Day Was Slave Emancipation Day in Sierra Leone Protectorate." (Jan. 2, 1928.)  
**Tanganyika Territory:** (Ill.) "Where Stanley Met Livingstone at Ujiji." (Nov. 28, 1927.)  
**Uganda:** (Ill.) "How To Dress the Hair in Southeast Uganda." (Dec. 19, 1927.)  
**Union of South Africa:** (Diagram) "Flags of British Dominions." (Dec. 5, 1927.)  
 "South Africa Adds to the Array of British Flags." (Dec. 5, 1927.)

## ASIA

- General:** "Unmapped Regions of the Old World." (Nov. 7, 1927.)  
 "Where Men Wear Skirts." (Nov. 21, 1927.)  
**Afghanistan:** (Ill.) "Amir Habibullah New Capital for Afghanistan." (April 4, 1927.)  
 (Ill.) "The Amir's Clock Tower in Kabul, Constructed by Europeans in 1913." (April 4, 1927.)  
 "New Airplane Route Will Penetrate to the Isolated Capital of Afghanistan." (Feb. 20, 1928.)  
 (Ill.) "Post Office on the Road to Kabul." (Feb. 20, 1928.)  
**Arabia:** "Medina Connected with Mecca by Bus Line." (Jan. 9, 1928.)  
 (Ill.) "The Most Picturesque Hat Ever Designed for Men." (Dec. 5, 1927.)  
 (Ill.) "Pilgrims Encamped Outside Mecca." (Jan. 9, 1928.)  
**Asia Minor:** (Map.) "A Map of Asia Minor and the Holy Land." (Oct. 31, 1927.)  
**China:** "Amoy: Where Boston's 'Tea Party' Ship Came From." (April 18, 1927.)  
 "Another Practice That the Western World Has Learned from China (Tung Oil)." (Dec. 12, 1927.)  
 "China's Great Wall, Man's Mightiest Structure." (Nov. 14, 1927.)  
 (Ill.) "The Devil Wears Skirts, According to the Tibetan Version." (Nov. 21, 1927.)  
 (Ill.) "Dock Workers with Their Peculiar Wheelbarrows at Shanghai." (March 28, 1927.)  
 "Fan Industry Booming in China." (March 14, 1927.)  
 (Ill.) "The Foot That Flies the Pump Controls the Crop in Many Parts of China." (April 25, 1927.)  
 (Ill.) "Haystacks Tied to Trees in the Paddy Field of a Szechwan Farm." (April 25, 1927.)  
 "Kiangsu: Battle Ground for Shanghai." (March 28, 1927.)  
 "The Most Popular Geographic Names." (March 14, 1927.)  
 "Mukden, Which Meets an Immigrant Flood from Shantung." (Jan. 9, 1928.)  
 "Nanking, China: Where Americans Lived on a Dragon's Back." (April 25, 1927.)  
 "Odd Ways to Pay Taxes." (March 21, 1927.)  
 (Ill.) "On a Noisy Road to Knowledge." (Nov. 14, 1927.)  
 (Ill.) "Straining His Chinese Back Against the Yangtze Current That You May Have Good Varnish." (Dec. 12, 1927.)  
 (Ill.) "Their Product Reaches the United States Through Tientsin Port." (Jan. 23, 1928.)  
 "Tientsin: Where U. S. Marines Put out an American Fire." (Jan. 23, 1928.)  
 "Tipping: A Custom That Varies the World Over." (Nov. 21, 1927.)  
 "Why Varnish Users in the United States Are Concerned When War Breaks Out In China." (Dec. 12, 1927.)  
 (Ill.) "A Yak Caravan Waiting To Be Loaded." (March 21, 1927.)  
**India:** (Ill.) "Alligators on the Bank of an Indian Lake." (Nov. 7, 1927.)  
 "Bengal: Where Cholera May Affect American Supply of Gunny Sacks." (Jan. 2, 1928.)  
 (Ill.) "How They Hunt Bengal's Namesake Bear." (Jan. 2, 1928.)  
 "Hyderabad, the Texas of India." (April 25, 1927.)  
 (Ill.) "Pathans from Afghanistan Have Populated Parts of Northwest India." (Feb. 20, 1928.)  
 (Ill.) "The Principal Landmark of Hyderabad, India." (April 25, 1927.)  
 "Rajpipla, a Tiny State of Giant India." (Nov. 7, 1927.)  
 (Ill.) "Seeking Pearls in Oysters from the Ceylon Banks." (Feb. 6, 1928.)  
**Iraq (Mesopotamia):** (Ill.) "The Garden of Eden Hopes to Recover Reputation of Paradise with Irrigation Canals." (Jan. 2, 1928.)  
 "Iraq, Traditional Garden of Eden, Has Modern Ambitions." (Jan. 2, 1928.)  
**Japan:** (Ill.) "Earthquake Crack in a Dike of Made Land, Japan." (March 28, 1927.)  
 (Ill.) "Fan-Making in Japan: Drying the 'Bones' of the Fan." (March 14, 1927.)  
 "The Geography in a Japanese Print." (Dec. 5, 1927.)  
 (Ill.) "Mt. Fuji, the Inspiration for Many Japanese Artists." (Dec. 5, 1927.)  
 (Ill.) "An Osaka Goldfish Vender's Wooden Boxes of Goods." (Feb. 13, 1928.)  
 "Osaka: Terminus of Japan's First Airplane Passenger Service." (Feb. 13, 1928.)  
 (Ill.) "Tea Pickers of Japan." (April 18, 1927.)  
 "Why Japan Has So Many Earthquakes." (March 28, 1927.)  
**Malay Peninsula:** (Ill.) "Chairs and Soap in the Raw." (April 25, 1927.)  
 (Ill.) "Malaya's Kind of Steam Roller." (April 25, 1927.)  
 "The Malay States: Home of Rubber and Tin." (March 14, 1927.)  
 (Ill.) "A Forest of Plantation Rubber in the Straits Settlements." (Feb. 13, 1928.)  
 (Ill.) "More Men in the World Wear Skirts or Kimonos than Trousers." (Nov. 21, 1927.)  
 (Ill.) "Singapore, like Canton, has a Chinese Boat Colony." (March 14, 1927.)  
**Palestine:** (Ill.) "And There Were in the Same Country Shepherds Abiding in the Fields, Keeping Watch over Their Flocks by Night." (Dec. 19, 1927.)  
 "Earthquake Isolates Jerusalem's Walling Place." (Nov. 14, 1927.)  
 (Ill.) "A Shepherd of Bethlehem Piping on His Handmade Flute." (Dec. 19, 1927.)  
 "The Shepherds of the First Christmas and To-day." (Dec. 19, 1927.)  
 (Ill.) "Near Sychar Is Jacob's Well, Its Depth Indicated by the Length of the Rope." (Oct. 31, 1927.)  
**Russia:** (Ill.) "Bokhara Students of the Koran." (Nov. 28, 1927.)  
 "Unscrambling Russian Asia's Scrambled Geography." (Nov. 28, 1927.)

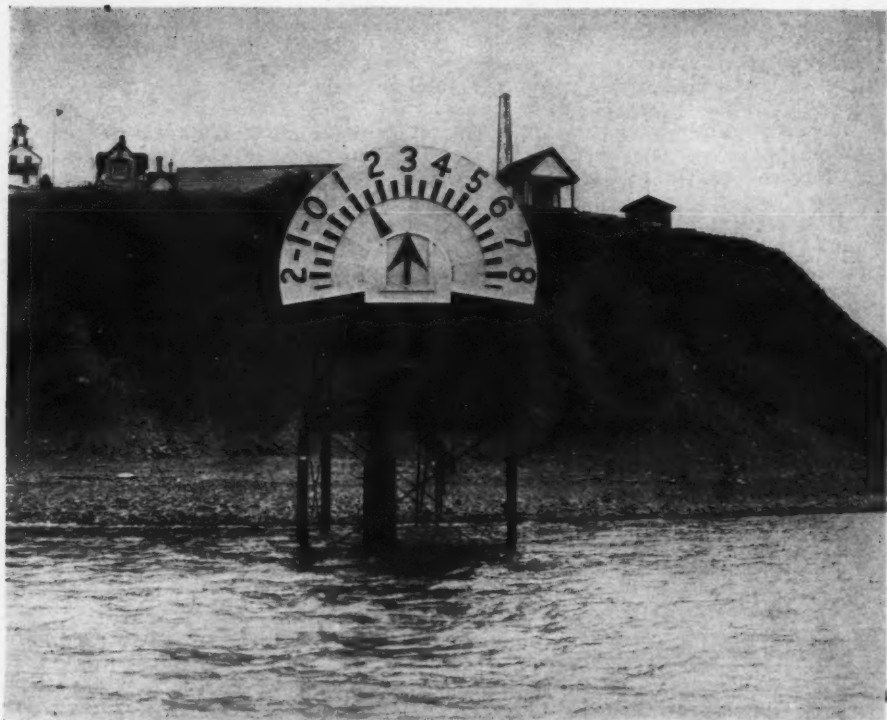
When all the values for distance and mass are inserted in the rather formidable equations for the pulls of the moon at the center of the earth and at the surface, and for the pulls of the sun at those two points, it works out that the difference in the moon's pulls is roughly two-and-a-quarter times the difference in the sun's pulls. The moon, therefore, exerts two-and-a-quarter times the tide producing power exerted by the sun.

#### **When Sun and Moon Cooperate We Have Highest Tides**

Most of the time the sun and moon are pulling in different directions. But twice each month they pull in the same line. It is then that our coasts have their highest tides.

Theoretically, every star and planet and satellite in the universe raises its separate tide in our oceans. Actually, however, even Jupiter, the greatest of our sister planets, is so far away and, relatively, so small that its influence cannot be detected. To all intents, therefore, it may be said that only the moon, our nearest neighbor in space, and the sun, our most powerful one, have a share in making the earth's tides.

**Bulletin No. 3, February 20, 1928.**



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#### **AN AUTOMATIC TIDAL INDICATOR**

This purely American aid to navigation automatically shows the height of the water at any moment. When the arrows point upward the tide is rising; when downward, it is falling. The index on the scale shows that at the moment when the photograph was taken there was an excess of  $1\frac{1}{2}$  feet above the normal level of the water.

- Spain:** "The Airplane on the Tagus River." (Nov. 21, 1927.)  
 (Ill.) "A Bull Fight in a Village of North Spain." (March 7, 1927.)  
 (Ill.) "Milk on the Roof in Seville." (April 11, 1927.)  
 (Ill.) "The Reputed Casket of Columbus in the Seville Cathedral." (Feb. 6, 1928.)  
 "Seville, at Home to the Americas, 1928." (April 11, 1927.)  
 "The Story of Cork." (Oct. 17, 1927.)  
 "Vigo: Port of Spanish Armadas of Commerce." (March 7, 1927.)  
**Sweden:** "Gottland Island, Sweden's Baltic Sicily." (Feb. 6, 1928.)  
**Wales:** "Llanfairpwllgwyngyllgogerychwyrndrobwllllandsyllgogogoch." (Feb. 28, 1927.)  
 (Ill.) "A Steam Engine That Climbs Up Mount Snowdon." (Feb. 28, 1927.)  
**Yugoslavia:** (Ill.) "A Corn-Shelling Bee in Yugoslavia." (May 9, 1927.)

#### NORTH AMERICA

- General:** "Many World Areas Still Are Unexplored." (Nov. 7, 1927.)  
 (Ill.) "Parts of Both Americas Still Await a Columbus To Explore Them." (Nov. 7, 1927.)  
**Alaska:** "Expedition To Study Alaskan Volcanoes and Earthquakes." (Nov. 21, 1927.)  
 "United States Owns Biggest and Least Harmful Volcano Chain." (April 18, 1927.)  
 (Ill.) "The Very Beginnings of a River Valley." (Nov. 21, 1927.)  
**Canada:** (Ill.) "Operators Packing Sardines, Province of New Brunswick, Canada." (Oct. 31, 1927.)  
**Labrador:** "Historical Shrines of United States and Canada in France." (Dec. 12, 1927.)  
 (Ill.) "Dr. Wilfred T. Grenfell and Miss Ferris, a Graduate Nurse in Charge of the International Grenfell Hospital at Porteau Bay." (March 28, 1927.)  
 "London Dealer Doubles Area of Labrador." (March 28, 1927.)  
 (Map.) "The New and Old Boundaries of Labrador." (April 4, 1927.)  
**Mexico:** "American Towns below Sea Level." (March 21, 1927.)  
 "By Automobile to Monterrey, the Chicago of Mexico." (March 28, 1927.)  
 (Ill.) "Digging for Water in Lower California: Mexico." (Jan. 23, 1928.)  
 "Do You Know Too Little About Mexico?" (Jan. 9, 1928.)  
 "Hate, the Funniest Things in the World." (Dec. 5, 1927.)  
 "In the Yucatan Peninsula, Where Sinal has Been Made a Public Utility." (Feb. 28, 1927.)  
 (Ill.) "The Many Lakes Surrounding Mexico City Are Connected with the Capital by Canals." (Jan. 9, 1928.)  
 (Ill.) "Mexican School Boys and Girls Were Excused from Classes To Welcome Lindbergh." (Jan. 9, 1928.)  
 (Ill.) "Mount Orizaba, 125 Miles Southeast of Mexico City." (March 21, 1927.)  
 "New Rail Link Opens up West Coast Mexico." (May 2, 1927.)  
 (Ill.) "On Cars on a Mexican Road." (March 28, 1927.)  
 "Scientists Seek Source of Lower California's Lost Prosperity." (Jan. 23, 1928.)  
 (Ill.) "Sinaloa Horsemen of Mexico Wear Leather Flaps To Protect Their Legs from Thorns." (Mar. 2, 1927.)  
 (Ill.) "Sorting Palms for American Straw Hats." (Oct. 17, 1927.)  
 "Quintana Roo, a Mexican Area Which Still Is Remote from the Telephone." (Oct. 24, 1927.)  
 "The 28 States of Mexico." (March 21, 1927.)  
 (Map.) "The West Coast of Mexico." (May 2, 1927.)

#### UNITED STATES

- General:** "Changes in the Geography of Meat." (Jan. 23, 1928.)  
 (Ill.) "A Former Capitol of the United States." (Jan. 30, 1928.)  
 "France's Notion Counter and America's General Store." (Feb. 6, 1928.)  
 "Historical Shrines of United States and Canada in France." (Dec. 12, 1927.)  
 (Ill.) "A Hose Supersedes the Paint Brush." (Jan. 30, 1928.)  
 "Hues of 1928 Automobiles Are Products of Corn, Cotton and Coal Tar." (Jan. 30, 1928.)  
 "Many World Areas Still Are Unexplored." (Nov. 7, 1927.)  
 "The Most Popular Geographic Names." (March 14, 1927.)  
 "The Nine Capitals of the United States." (Jan. 30, 1928.)  
 "Our State Park Systems." (April 18, 1927.)  
 "Typing: A Custom That Varies the World Over." (Nov. 21, 1927.)  
**Arkansas:** (Ill.) "Refugees on a Mound at Modoc, Arkansas." (May 16, 1927.)  
**California:** "American Towns below Sea Level." (March 21, 1927.)  
 (Ill.) "Ancient Shore Line on Mountains Bordering Imperial Valley." (March 21, 1927.)  
**Illinois:** (Ill.) "Typical Scene in the Stock Yards, Chicago." (Jan. 23, 1928.)  
**Louisiana:** "Evangeline's Eden in Louisiana Engulfed by Flood." (Oct. 17, 1927.)  
**Maryland:** (Ill.) "A Catch of Menhaden: Another Picture Which Has a Long Geographic Story." (Jan. 2, 1928.)  
 "The Chesapeake Bay Country." (Feb. 13, 1928.)  
 (Ill.) "A One-Horsepower Machine for Hauling in a Maryland Shad Seine." (Jan. 2, 1928.)  
 (Ill.) "St. Mary's River, Where the Maryland Colonists Landed." (Feb. 13, 1928.)  
 (Ill.) "Tonging Oysters in Chesapeake Bay." (Feb. 13, 1928.)  
 "Using the Geographic in the Classroom." (Jan. 2, 1928.)  
**Mississippi:** "Way the Mississippi Goes on a Rampage." (May 16, 1927.)  
**New Mexico:** "Carlsbad Cavern Draws Many Visitors." (Dec. 12, 1927.)  
 "A Gift More Prized Than Turquoise by the Zuni." (May 2, 1927.)  
 (Ill.) "Monuments Built by Drops of Water in Carlsbad Cavern." (Dec. 12, 1927.)  
 (Ill.) "A Zuni Girl with a Water Jar." (May 2, 1927.)  
**New York:** (Ill.) "As the Airman Sees the American Falls at Niagara." (April 18, 1927.)  
**North Carolina:** (Ill.) "Compressing Cotton for Shipment." (Nov. 14, 1927.)  
 "Gathering North Carolina's Third Richest Crop (Lumber)." (Nov. 14, 1927.)  
 "North Carolina's New Industries." (Nov. 14, 1927.)  
**Pennsylvania:** "Glass: A Pennsylvania Specialty." (Dec. 19, 1927.)  
 (Ill.) "Removing the Waste Ends of Glass." (Dec. 19, 1927.)  
 (Ill.) "The Viaduct across the Tunkhannock, in Pennsylvania." (April 18, 1927.)  
**South Dakota:** (Ill.) "Buffalo in a Black Hills Preserve." (Nov. 21, 1927.)  
 (Ill.) "Cathedral Spire of the Black Hills Viewed from Harney Peak." (Nov. 21, 1927.)  
 "The Black Hills: Farthest West Presidential Summer Home." (Nov. 21, 1927.)  
**Texas:** "Old Geronimo Was One of the Last of the Texas Longhorns Which Have Been Superseded by More 'Beefy' Steers." (Jan. 23, 1928.)  
**Virginia:** "The Chesapeake Bay Country." (Feb. 13, 1928.)

#### CENTRAL AMERICA

- Costa Rica:** "Costa Rica: The Banana Station on Lindbergh's Good Will Trip." (Jan. 16, 1928.)  
 (Ill.) "A Year-Old Coffee Tree." (Jan. 16, 1928.)

#### SOUTH AMERICA

- General:** "Many World Areas Still Are Unexplored." (Nov. 7, 1927.)  
 (Ill.) "Parts of Both Americas Still Await a Columbus to Explore Them." (Nov. 7, 1927.)  
 "What an Amazon Tropical Forest Looks Like from a Hydroplane." (April 11, 1927.)  
**Argentina:** "Changes in the Geography of Meat." (Jan. 23, 1928.)

- Siberia: (III) "Two Russian Gypsies of Irkutsk, Siberia." (Nov. 7, 1927.)  
 Tibet: (III) "The Devil Wears Skirts, According to the Tibetan Version." (Nov. 21, 1927.)  
 Trans-Jordan: (III) "The Land of the First Philadelphi." (Oct. 31, 1927.)  
 Turkey: (III) "A Buffalo-Drawn Disk-Wheel Cart of Anatolia." (April 18, 1927.)  
 (Hats, the Funniest Things in the World." (Dec. 5, 1927)

## AUSTRALIA

- Australia: "Australia Plots to Recover 60 Million Acres Captured by the American Prickly Pear." (Feb. 13, 1928.)  
 "Seaplanes to Bring Hobart, Tasmania, 12 Hours Nearer Australia." (March 7, 1927.)

## EUROPE

- General: "Changes in the Geography of Meat." (Jan. 23, 1928.)  
 "The Most Popular Geographic Names." (March 14, 1927.)  
 "Strange Methods of Advertising." (March 21, 1927.)  
 "Typing: A Custom That Varies the World Over." (Nov. 21, 1927.)  
 "Unmapped Regions of the Old World." (Nov. 7, 1927.)  
 Albania: "The Border Which Brings the Balkans into the Headlines Again." (May 9, 1927.)  
 Belgium: "Antwerp Seeks To Improve Its Good Fortune." (April 11, 1927.)  
 "The Most Important Day of the Year in Bruges." (May 2, 1927.)  
 Czecho-slovakia: (III) "Wash Day on a Belgian Canal Barge." (April 11, 1927.)  
 (III) "Folk-Dancing among the Czechs." (Oct. 24, 1927.)  
 (III) "A Public School in Prague Now Known as Praha." (Oct. 24, 1927.)  
 England: "Bath, England, Honors Its Planner." (Jan. 9, 1928.)  
 (Diagram) "Flags of British Dominions." (Dec. 5, 1927.)  
 (III) "The Former Shakespeare Memorial Theater at Stratford." (Jan. 30, 1928.)  
 "Girl's Plans Win in Contest for New Shakespeare Theater at Stratford." (Jan. 30, 1928.)  
 "Odd Ways To Pay Taxes." (March 21, 1927.)  
 (III) "Sawing Stone for Houses in Bermuda." (April 4, 1927.)  
 (III) "Ships Chained Ashore in the Harbor of Clovelly, Cornwall." (Feb. 6, 1928.)  
 "Strange Methods of Advertising." (March 21, 1927.)  
 (III) "A Typical London Bus." (March 21, 1927.)  
 "Where Isaac Walton Fished and Wrote Fine Prose." (Dec. 12, 1927.)  
 "William the Conqueror, Founder of the English Language Empire." (Oct. 24, 1927.)  
 Esthonia: "Esthonia, a Young Old State." (April 4, 1927.)  
 France: (Map) "An Outline Map of the Provinces of France." (Nov. 14, 1927.)  
 "Correze: Where Chestnuts Come From." (Nov. 14, 1927.)  
 "Corsica: An Island Jewel of France." (Oct. 24, 1927.)  
 "France from a Cherbourg-Paris Boat-Train." (March 7, 1927.)  
 "France's Notion Counter and America's General Store." (Feb. 6, 1928.)  
 "France To Improve Its Welcome to Americans at Cherbourg." (Feb. 28, 1927.)  
 (III) "The Famous Arch of Triumph in Paris Beneath Which is the Tomb of France's Unknown Soldier." (Feb. 20, 1928.)  
 "Getting Acquainted with French Railroad Trains." (Feb. 20, 1928.)  
 "Historical Shrines of United States and Canada in France." (Dec. 12, 1927.)  
 (III) "Interior of a Department Store in Paris, France." (Feb. 6, 1928.)  
 (III) "On the Famous Roads of France." (March 7, 1927.)  
 (III) "The Pantheon, a Goal for Tourists in Paris." (March 7, 1927.)  
 (III) "A Peasant Girl of Normandy." (Oct. 24, 1927.)  
 (Map) "Sketch Map Showing Home Towns of Champlain, Jacques Cartier, La Salle and Other French Explorers Who Have Figured in American History." (Dec. 12, 1927.)  
 (Map) "Sketch Map Showing the Size and Position of Corsica in Relation to the Mother Country." (Oct. 24, 1927.)  
 "Strange Methods of Advertising." (March 21, 1927.)  
 (III) "A Typical Peasant's Bed in the Vicinity of Cherbourg." (Feb. 28, 1927.)  
 Germany: "Bayreuth, the City That Music Made." (Oct. 31, 1927.)  
 (III) "Freight Barges and Steamers on the Rhine." (April 11, 1927.)  
 "Germany and Poland Work for Peace and Understanding in Upper Silesia." (March 28, 1927.)  
 "Hemelgoland: Which Progresses from Big Guns to Big Lobsters." (Dec. 19, 1927.)  
 (III) "Hesse is the Home of Famous Vineyards." (Jan. 2, 1928.)  
 "Modern Hesse, from Which the Hessians Did Not Come." (Jan. 2, 1928.)  
 "The Old Gentleman of the Neander Thal and the Moonlight Sonata." (Dec. 5, 1927.)  
 (III) "Steel Works at Dortmund in the Ruhr District." (March 28, 1927.)  
 Greece: "Agora: The Shopping District of Ancient Athens." (March 14, 1927.)  
 (III) "Harvesting Olives in Greece." (May 9, 1927.)  
 (III) "The Hermes of Praxiteles." (March 14, 1927.)  
 "How Swatting the Mosquito Brings Prosperity in Macedonia." (May 16, 1927.)  
 (III) "A Refugee Home in Macedonia." (May 16, 1927.)  
 (III) "Rows of Chairs in the Theater of Dionysius below the Acropolis, Athens." (May 9, 1927.)  
 "A Trip to Delphi Where a Greek Tragedy Will Be Acted in the Ancient Theater." (May 9, 1927.)  
 "Where Men Wear Skirts." (Nov. 21, 1927.)  
 Hungary: (III) "A Bit of Saxony Surviving in Transylvania." (March 7, 1927.)  
 "Italy Gives Hungary Port Rights at Fiume." (May 2, 1927.)  
 Italy: "Carrara Marks the Graves of American Dead in Europe." (Jan. 30, 1928.)  
 "Hats, the Funniest Things in the World." (Dec. 5, 1927.)  
 (III) "Hauling Marble from Carrara's Quarries." (Jan. 30, 1928.)  
 "Italy Gives Hungary Port Rights at Fiume." (May 2, 1927.)  
 (III) "The Leghorn Takes Its Name from Livorno, Italy." (Feb. 28, 1927.)  
 "Livorno, Famous for Chickens and Hats, Expects an Industrial Boom." (Feb. 28, 1927.)  
 "Northern Italy One of Europe's Language Battle Areas." (Oct. 24, 1927.)  
 (III) "Rome's Sea-going Hacka Drawn up in the Courtyard of St. Peter's." (April 11, 1927.)  
 "Taxis and Subway Scrap Rome's Sea-going Hacka." (April 11, 1927.)  
 (III) "A Vender of Wooden Pails and Barrels Having an Afternoon Nap at the Port of Fiume." (May 2, 1927.)  
 Latvia: (III) "A Primitive Wooden Plow Is Used by Some Latvian Farmers." (April 4, 1927.)  
 Netherlands: (III) "Airplane View of Amsterdam: The New York of Holland." (Oct. 31, 1927.)  
 "Amsterdam: The New York of Holland." (Oct. 31, 1927.)  
 (III) "A View Near Amsterdam Showing Sections of Artificially Drained Land and Windmills." (Oct. 31, 1927.)  
 Poland: "Galicia: Where Poland's Growing Pains Can Often Be Located." (Nov. 28, 1927.)  
 (III) "Galician Peasants in Embroidered Leather Jackets." (Nov. 28, 1927.)  
 "Germany and Poland Work for Peace and Understanding in Upper Silesia." (March 28, 1927.)  
 Portugal: "The Airplane on the Tagus River." (Nov. 21, 1927.)  
 (III) "A Sardine Merchant of Lisbon." (Nov. 21, 1927.)  
 Rumania: (III) "A Bit of Saxony Surviving in Transylvania." (March 7, 1927.)  
 "Brasov: Where Queen Marie Urges a New Capital for Rumania." (March 7, 1927.)  
 "Sinai: Summer Home of Rumania's Boy King." (Oct. 17, 1927.)  
 Scotland: "Where Men Wear Skirts." (Nov. 21, 1927.)



- Corn:** (III.) "A Corn-Shelling Bee in Yugoslavia." (May 9, 1927.)  
 "Hues of 1928 Automobiles Are Products of Corn, Cotton and Coal Tar." (Jan. 30, 1928.)
- Cotton:** (III.) "Compressing Cotton for Shipment" (North Carolina). (Nov. 14, 1927.)  
 "Hues of 1928 Automobiles are Products of Corn, Cotton and Coal Tar." (Jan. 30, 1928.)  
 "Uganda: A Land of Cotton in Africa." (Dec. 19, 1927.)
- Fans:** (III.) "Fan-Making in Japan: Drying the 'Bones' of the Fan." (March 14, 1927.)  
 "Fan Industry Booming in China." (March 14, 1927.)
- Fish:** (III.) "A Catch of Menhaden: Another Picture Which Has a Long Geographic Story." (Jan. 2, 1928.)  
 "Helgoland: Which Progresses from Big Guns to Big Lobsters." (Dec. 19, 1927.)  
 "A One-Horsepower Machine for Hauling in a Maryland Shad Seine." (Jan. 2, 1928.)  
 "Operators Packing Sardines: Province of New Brunswick, Canada." (Oct. 31, 1927.)  
 "An Osaka Goldfish Merchant's Wooden Boxes of 'Goods.'" (Feb. 13, 1928.)  
 "A Sardine Merchant of Lisbon." (Nov. 21, 1927.)
- Flour:** (III.) "Tuareg Woman Sifting Flour." (April 4, 1927.)
- Flowers:** (III.) "For Years Bermuda Monopolized the Easter Lily Market." (April 4, 1927.)
- Glass:** (III.) "Glass: A Pennsylvania Specialty." (Dec. 19, 1927.)  
 "Removing the Waste Ends of Glass." (Dec. 19, 1927.)
- Gloves:** (III.) "Kid Gloves from Corsica, Napoleon's Birthplace." (Dec. 5, 1927.)
- Grapes:** (III.) "Modern Hesse, from Which the Hessians Did Not Come." (Jan. 2, 1928.)  
 "Hesse Is the Home of Famous Vineyards." (Jan. 2, 1928.)
- Grass:** (III.) "Dried Grass Fuel Gathered on Grave Lands, Shanghai." (March 28, 1927.)
- Hairnets:** (III.) "Their Product Reaches the United States through Tientsin Port." (Jan. 23, 1928.)
- Hats:** (III.) "The Corsican Peasants' Grass Hat Closely Resembles the Roman Petasus, Ancestor of the Modern Hat." (Dec. 5, 1927.)  
 "Hats, the Funniest Things in the World." (Dec. 5, 1927.)  
 "Livorno, Famous for Chickens and Hats, Expects an Industrial Boom." (Feb. 28, 1927.)  
 "The Most Picturesque Hat Ever Designed for Men." (Dec. 5, 1927.)
- Hemp:** (III.) "Drying Sisal in Kenya Colony, Africa." (Feb. 28, 1927.)
- Jute:** (III.) "In the Yucatan Peninsula, Where Sisal Has Been Made a Public Utility." (Feb. 28, 1927.)
- Marble:** (III.) "Bengal: Where Cholera May Affect American Supply of Gunny Sacks." (Jan. 2, 1928.)  
 "Carrara Marks the Graves of America's Dead in Europe." (Jan. 30, 1928.)
- Meat:** (III.) "Hauling Marble from Carrara's Quarries." (Jan. 30, 1928.)
- Metals:** (III.) "Changes in the Geography of Meat." (Jan. 23, 1928.)  
 "British Guiana, Where Kitchen Cooking Dishes Come from." (Jan. 23, 1928.)  
 "One Other Use of Bauxite from British Guiana." (Jan. 23, 1928.)
- Oil:** (III.) "An Oil Palm Cone, Source of an Ingredient of American Soap." (Jan. 2, 1928.)  
 "Another Practice That the Western World Has Learned from China (Tung Oil)." (Dec. 12, 1927.)  
 "Why Varnish Users in the United States Are Concerned When War Breaks Out in China." (Dec. 12, 1927.)
- Olives:** (III.) "Harvesting Olives in Greece." (May 9, 1927.)
- Oysters:** (III.) "Tonging Oysters in Chesapeake Bay." (Feb. 13, 1928.)
- Paints and Varnish:** (III.) "A Hose Supersedes the Paint Brush." (Jan. 30, 1928.)  
 "Hues of 1928 Automobiles Are Products of Corn, Cotton, and Coal Tar." (Jan. 30, 1928.)  
 "Straining His Chinese Back Against the Yangtze Current That You May Have Good Varnish." (Dec. 21, 1927.)
- Pearl:** (III.) "Australia Plots to Recover 60 Million Acres Captured by the American Prickly Pear." (Feb. 13, 1928.)  
 "The Prickly Pear Is Not an Unwelcome Guest in Sardinia." (Feb. 13, 1928.)
- Pearls:** (III.) "Bahrein, the 'Pearl' of the Persian Gulf, before the League of Nations." (Feb. 6, 1928.)  
 "Scientists Seek Source of Lower California's Lost Prosperity." (Jan. 23, 1928.)  
 "Seeking Pearls in Oysters from the Ceylon Banks." (Feb. 6, 1928.)
- Rubber:** (III.) "Up for Air: Note the Clamps on the Pearl Diver's Nose." (Feb. 6, 1928.)  
 "A Forest of Plantation Rubber in the Straits Settlements." (Feb. 13, 1928.)  
 "The Malay States: Home of Rubber and Tin." (March 14, 1927.)  
 "The Man Who Changed the Geography of Rubber." (Feb. 13, 1928.)  
 "To the Amazon Jungle the World Looked for Its Rubber Supply 20 Years Ago." (Feb. 13, 1928.)
- Salt:** (III.) "A Mound of Salt at Porto Vecchio, Corsica." (Oct. 24, 1927.)
- Sewing Machines:** (III.) "Bringing a Western Sewing Machine to the Harem: Casablanca." (May 9, 1927.)
- Sharks:** (III.) "A 14-Foot Man-Eating Shark Provides a Feast for a Malay Crew." (Jan. 9, 1928.)  
 "Useful Shark." (Jan. 9, 1928.)
- Soap:** (III.) "Chairs and Soap in the Raw." (April 25, 1927.)
- Steels:** (III.) "Steel Works at Dortmund in the Ruhr District." (March 28, 1927.)
- Steers:** (III.) "The Cuts of a Modern Beef Steer, a Product of Intensive Breeding." (Jan. 23, 1928.)  
 "Old Geronimo Was One of the Last of the 'Texas Longhorns' Which Have Been Superseded by More 'Beefy' Steers." (Jan. 23, 1928.)
- Stones:** (III.) "Sawing Stone for Houses in Bermuda." (April 4, 1927.)
- Sugar Cane:** (III.) "Crushing Sugar Cane in a Cuban Mill." (Jan. 30, 1928.)
- Tea:** (III.) "Tea Pickers of Japan." (April 18, 1927.)
- Timber:** (III.) "Gathering North Carolina's Third Richest Crop." (Nov. 14, 1927.)
- Tin:** (III.) "The Malay States: Home of Rubber and Tin." (March 14, 1927.)  
 "Tin, the Only Important Metal Which the United States Does Not Produce." (April 25, 1927.)
- Tobacco:** (III.) "The Rhodesias Take a Leaf Out of America's Book." (Nov. 28, 1927.)

#### GEOGRAPHY, ANTHROPOLOGY, SPORTS AND GAMES

- Advertising:** (III.) "Strange Methods of Advertising." (March 21, 1927.)  
 "A Typical London Bus." (March 21, 1927.)
- Agriculture:** (III.) "A Cork-Stripper at Work." (Oct. 17, 1927.)  
 "The Foot That Piles the Pump Controls the Crop in Many Parts of China." (April 25, 1927.)  
 "Freeing Mandioca of Its Poison." (May 9, 1927.)  
 "Harvesting Olives in Greece." (May 9, 1927.)
- Anthropology:** (III.) "Haystacks Tied to Trees in the Paddy Field of a Szechwan Farm." (April 25, 1927.)  
 "The Old Gentleman of the Neander Thal and the 'Moonlight Sonata.'" (Dec. 5, 1927.)
- Art:** (III.) "A Bit of Saxony Surviving in Transylvania." (March 7, 1927.)  
 "The Geography in a Japanese Print." (Dec. 5, 1927.)  
 "The Hermes of Praxiteles." (March 14, 1927.)
- Beds:** (III.) "Mt. Fuji, the Inspiration for Many Japanese Artists." (Dec. 5, 1927.)
- Boats:** (III.) "A Typical Peasant's Bed in the Vicinity of Cherbourg." (Feb. 28, 1927.)  
 "Another Practice That the Western World Has Learned from China." (Dec. 12, 1927.)  
 "Freight Barges and Steamers on the Rhine." (April 11, 1927.)  
 "Singapore, like Canton, Has a Chinese Boat Colony." (March 14, 1927.)
- Boundaries:** (III.) "The Border Which Brings the Balkans into the Headlines Again." (May 9, 1927.)  
 "Germany and Poland Work for Peace and Understanding in Upper Silesia." (March 28, 1927.)  
 "London Decision Doubles Area of Labrador." (March 28, 1927.)  
 "The New and Old Boundaries of Labrador." (April 4, 1927.)  
 "Unscrambling Russian Asia's Scrambled Geography." (Nov. 28, 1927.)
- Buildings:** (III.) "The Chilean White House, Santiago, Where the American Flyers Will Be Received." (Feb. 28, 1927.)  
 "A Former Capitol of the United States." (Jan. 30, 1928.)  
 "The Pantheon, a Goal for Tourists in Paris." (March 7, 1927.)  
 "The Principal Landmark of Hyderabad, India." (April 25, 1927.)



- Brazil:** (Ill.) "Freeing Mandioca of Its Poison." (May 9, 1927.)  
 (Ill.) "The Hydroplane Reveals an Indian Hut Concealed in the Dense Jungle of the Amazon Valley Tropical Forests." (April 11, 1927.)  
 (Ill.) "Indians Inspecting a Hydroplane on a Tributary of the Amazon." (April 11, 1927.)  
 "The Man Who Changed the Geography of Rubber." (Feb. 13, 1928.)  
 "The Mystery of Poison Darts in the Amazon Valley." (May 9, 1927.)  
 (Ill.) "To the Amazon Jungle the World Looked for its Rubber Supply 20 Years Ago." (Feb. 13, 1928.)  
**British Guiana:** (Ill.) "An Obscure and Isolated Wonder of the World: Kaieteur, British Guiana." (Jan. 23, 1928.)  
 "British Guiana, Where Kitchen Cooking Dishes Come From." (Jan. 23, 1928.)  
 (Ill.) "One Other Use of Bauxite from British Guiana." (Jan. 23, 1928.)  
**Chile:** (Ill.) "The Chilean White House, Santiago, Where the American Flyers Will be Received." (Feb. 28, 1927.)  
 "Santiago, 'Good Will' Flyers' Last Capital Before Rounding South America." (Feb. 28, 1927.)  
 (Ill.) "Selling Chile's National Flower, the Copihue." (Feb. 28, 1927.)  
**Colombia:** (Ill.) "An Alligator Caught on the Magdalena River." (Nov. 28, 1927.)  
 (Map.) "Map of The Republic of Colombia." (Nov. 28, 1927.)  
 "Why Bogota Gives Thanks for the Airplane." (Nov. 28, 1927.)  
**Paraguay:** "American Religious Sect Finds a New Home in Paraguay." (Jan. 16, 1928.)  
 (Ill.) "Son of a Paraguayan Gaucho or Cowboy." (Jan. 16, 1928.)

## POLAR REGIONS

- General:** "Baffin Island: Where an American Expedition Hopes To Penetrate Unexplored Regions of the Far North." (May 16, 1927.)  
 "Commander Byrd Tells of Plans for Antarctic Explorations." (Jan. 16, 1928.)  
 (Ill.) "Halted by Fog and Pack Ice in Melville Bay." (March 21, 1927.)  
 "A Landlubber Goes Exploring." (March 21, 1927.)  
 (Ill.) "Rolling a Walrus onto a Rock at Low Tide." (May 16, 1927.)  
 "Some Citizens of the Antarctic Continent (Penguins)." (Jan. 16, 1928.)  
 (Ill.) "Table Manners in the Arctic." (May 16, 1927.)  
**Greenland:** "The Mighty Eater of Etah, Dean of an Eskimo Village." (Nov. 14, 1927.)  
 (Ill.) "Noo-Ka-Ping-Wa and His Harpoon Trophy." (Nov. 14, 1927.)  
**Iceland:** "Iceland To Heat House of Parliament with Hot Springs." (March 7, 1927.)  
 (Ill.) "Not Porcupines but Iceland Ponies Bringing Home the Hay." (March 7, 1927.)

## ISLANDS

- General:** "Unmapped Regions of the Old World." (Nov. 7, 1927.)  
 "Where Men Wear Skirts." (Nov. 21, 1927.)  
**Azores:** "The Azores: Where Flyers Alight and Cables Radiate." (Nov. 7, 1927.)  
 (Ill.) "The Typical Thick-Walled, Thatch-Roofed Country House of the Azorean Peasant: Note the Corn Stack to the Left." (Nov. 7, 1927.)  
**Baffin Island:** "Baffin Island: Where an American Expedition Hopes To Penetrate Unexplored Regions of the Far North." (May 16, 1927.)  
**Bahrein:** "Bahrein, the 'Pearl' of the Persian Gulf, Before the League of Nations." (Feb. 6, 1928.)  
**Bermuda:** "Bermuda Contracts for First Railroad Line." (April 4, 1927.)  
 (Ill.) "For Years Bermuda Monopolized the Easter Lily Market." (April 4, 1927.)  
 (Ill.) "Sawing Stone for Houses in Bermuda." (April 4, 1927.)  
**Ceylon:** (Ill.) "Seeking Pearls in Oysters from the Ceylon Banks." (Feb. 6, 1928.)  
**Corsica:** "Corsica: An Island Jewel of France." (Oct. 24, 1927.)  
 (Ill.) "The Corsican Peasant's Grass Hat Closely Resembles the Roman Petasus, Ancestor of the Modern Hat." (Dec. 5, 1927.)  
 (Ill.) "Kid Gloves from Corsica, Napoleon's Birthplace." (Dec. 5, 1927.)  
 (Ill.) "A Mound of Salt at Porto Vecchio, Corsica." (Oct. 24, 1927.)  
 (Ill.) "Piles of Cork-Oak, Neatly Trimmed, Ready for Baling; Bonifacio, Corsica." (Oct. 24, 1927.)  
 (Ill.) "Sketch Map Showing the Size and Position of Corsica in Relation to the Mother Country." (Oct. 24, 1927.)  
**Cuba:** "Cuba: Host to President Coolidge, Lindbergh and Pan American Conference." (Jan. 30, 1928.)  
 (Ill.) "Crushing Sugar Cane in a Cuban Mill." (Jan. 30, 1928.)  
 (Map.) "A Map of Cuba and the Neighboring Bahama Islands." (Jan. 30, 1928.)  
**East Indies:** "Borneo: Where Head-Hunting Still Survives." (April 25, 1927.)  
 (Ill.) "Sarawak (Borneo) Society Occupying a Ring-Side Seat at a Cock-Fight." (April 25, 1927.)  
 (Ill.) "New Guinea, Where 'Bread' Grows Overhead." (Jan. 16, 1928.)  
 "New Guinea: Where 'No Tickie, No Washee, May Be Good English." (Jan. 16, 1928.)  
**Elba:** "Elba, Napoleon's Island, Loses Treasures." (Dec. 5, 1927.)  
**Gottland:** "Gottland Island, Sweden's Baltic Sicily." (Feb. 6, 1928.)  
**Helgoland:** "Helgoland: Which Progresses from Big Guns to Big Lobsters." (Dec. 19, 1927.)  
**Iceland:** "Iceland to Heat Houses of Parliament with Hot Springs." (March 7, 1927.)  
**Newfoundland:** "Newfoundland: Senior Colony of Great Britain." (Oct. 31, 1927.)  
**New Zealand:** (Ill.) "Maori Warriors Rehearsing a Haka, or War Dance." (April 11, 1927.)  
 "Wellington Again Plays Hostess for New Zealand." (April 11, 1927.)  
**Philippine Islands:** "Baguio: One Residence of the New Governor of the Philippines." (Jan. 16, 1928.)  
 (Ill.) "Iliong Native of the Philippines Rehearsing an Old-Time War Dance." (Jan. 16, 1928.)  
 (Ill.) "Where Boys and Girls Go to School in the Philippines." (Jan. 16, 1928.)  
**Sardinia:** (Ill.) "Making Corks in Sardinia." (March 14, 1927.)  
 (Ill.) "The Prickly Pear Is Not an Unwelcome Guest in Sardinia." (Feb. 13, 1928.)  
 "Sardinia Adds a New Chapter to Its Romantic History." (March 14, 1927.)  
 (Ill.) "Snails for Sale." (March 14, 1927.)  
**Tasmania:** (Ill.) "Hobart and Mount Wellington: Tasmania." (March 7, 1927.)  
 "Seaplanes To Brouse Hobart, Tasmania's 12 Hours Nearer Australia." (March 7, 1927.)  
**West Indies:** (Ill.) "A Haitian Woman Riding Side Saddle." (Feb. 6, 1928.)  
 (Ill.) "A Sheath Gown in Caguan (Porto Rico)." (Oct. 17, 1927.)  
 "Santo Domingo: Site for Columbus Lighthouse." (Feb. 6, 1928.)

## COMMERCE AND INDUSTRY

- General:** "France's Notion Counter and America's General Store." (Feb. 6, 1928.)  
**Bananas:** "Costa Rica: The Banana Station on Lindbergh's Good Will Trip." (Jan. 16, 1928.)  
**Beans:** (Ill.) "Cleaning Cacao Beans, the Raw Materials of Cocoa." (May 2, 1927.)  
**Beef:** "The Cuban Modern Beef Steer; a Product of Intensive Breeding." (Jan. 23, 1928.)  
**Cacao:** "Development Rapid in the 'Cacao Coast' of Africa." (May 2, 1927.)  
**Cattle:** (Ill.) "Typical Scene in the Stock Yards, Chicago." (Jan. 23, 1928.)  
**Chestnuts:** "Correze: Where Chestnuts Come From." (Nov. 14, 1927.)  
**Chocolate:** "The Ibos of Nigeria, Who Help Supply Us with Chocolate." (Jan. 23, 1928.)  
**Clocks:** (Ill.) "The Amir's Clock Tower in Kabul, Constructed by Europeans in 1913." (April 4, 1927.)  
**Coin:** "Germany and Poland Work for Peace and Understanding in Upper Silesia." (March 28, 1927.)  
**Coffee:** (Ill.) "A Year-Old Coffee Tree." (Jan. 16, 1928.)  
**Cork:** (Ill.) "A Cork-Stripper at Work." (Oct. 17, 1927.)  
 (Ill.) "Making Corks in Sardinia." (March 14, 1927.)  
 (Ill.) "Piles of Cork-Oak, Neatly Trimmed, Ready for Baling; Bonifacio, Corsica." (Oct. 24, 1927.)  
 "The Story of Cork." (Oct. 17, 1927.)

- Races and Tribes** (Cont'd.)
- (III) "The Mighty Eater of Etah, Dean of an Eskimo Village." (Nov. 14, 1927.)
  - (III) "The Mystery of the Wandering Gypsy." (Nov. 7, 1927.)
  - (III) "Noo-Ka-Ping-Wa and His Harpoon Trophy." (Nov. 14, 1927.)
  - (III) "Pathans from Afghanistan Have Populated Parts of Northwest India." (Feb. 20, 1928.)
  - (III) "A Shepherd of Bethlehem Piping on His Handmade Flute." (Dec. 19, 1927.)
  - (III) "Son of a Paraguayan Gaucho or Cowboy." (Jan. 16, 1928.)
  - (III) "Two Russian Gypsies of Irkutsk, Siberia." (Nov. 7, 1927.)
  - (III) "A Zuni Girl with a Water Jar." (May 2, 1927.)
- Rulers:**
- (III) "New Airplane Route Will Penetrate to the Isolated Capital of Afghanistan." (Feb. 20, 1928.)
  - (III) "A New Sultan Proclaimed in a New Morocco." (Dec. 19, 1927.)
- Schools:**
- (III) "On a Noisy Road to Knowledge." (Nov. 14, 1927.)
  - (III) "A Public School in Prague, Now Known as Praha." (Oct. 24, 1927.)
  - (III) "Where Boys and Girls Go to School in the Philippines." (Jan. 16, 1928.)
- Ships:**
- (III) "Old Ironsides: The Ship That Was a Navy." (May 16, 1927.)
  - (III) "Ships Chained Ashore in the Harbor of Clovelly, Cornwall." (Feb. 6, 1928.)
  - (III) "U. S. Frigate 'Constitution' Popularly Known as 'Old Ironsides.'" (May 16, 1927.)
- Sports:**
- (III) "A Bull Fight in the Village of North Spain." (March 7, 1927.)
- Statues:**
- (III) "Terminus of Japan's First Airplane Passenger Service." (wrestling). (Feb. 13, 1928.)
- Stock Yards:**
- (III) "De Lesseps Stands on an Ever-Lengthening Breakwater at Port Said." (April 4, 1927.)
- Stores:**
- (III) "Interior of a Department Store in Paris, France." (Feb. 6, 1928.)
- Temples:**
- (III) "Earthquake Isolates Jerusalem's Wailing Place." (Nov. 14, 1927.)
- Theaters:**
- (III) "Girl's Plans Win in Contest for New Shakespeare Theater at Stratford." (Jan. 30, 1928.)
  - (III) "The Roman Shmoozer's Memory of the Chicago Theater at Stratford." (Jan. 30, 1928.)
  - (III) "Rows of Chairs in the Theater of Dionysus below the Acropolis, Athens." (May 9, 1927.)
  - (III) "A Trip to Delphi Where a Greek Tragedy Will Be Acted in the Ancient Theater." (May 9, 1927.)
- Tombs:**
- (III) "The Famous Arch of Triumph in Paris Beneath Which Is the Tomb of France's Unknown Soldier." (Feb. 20, 1928.)
  - (III) "Kiangsu: Battle Ground for Shanghai." (March 28, 1927.)
- Travel:**
- (III) "The Reputed Casket of Columbus in the Seville Cathedral." (Feb. 6, 1928.)
  - (III) "By Automobile to Monterey, the Chicago of Mexico." (March 28, 1927.)
  - (III) "France from a Cherbourg-Paris Boat-Train." (March 7, 1927.)
  - (III) "Getting Acquainted with French Railroad Trains." (Feb. 20, 1928.)
  - (III) "A Landlubber Goes Exploring." (March 21, 1927.)
- Walls:**
- (III) "China's Great Wall, Man's Mightiest Structure." (Nov. 14, 1927.)
- Wheelbarrows:**
- (III) "Near Sychar Is Jacob's Well, Its Depth Indicated by the Length of the Rope." (Oct. 31, 1927.)
- Windmills:**
- (III) "Dock Workers with Their Peculiar Wheelbarrows at Shanghai." (March 28, 1927.)
  - (III) "On the Famous Roads of France." (March 7, 1927.)
  - (III) "A View near Amsterdam Showing Sections of Artificially Drained Land and Windmills." (Oct. 31, 1927.)

#### NATURE STUDY

- Animals:**
- (III) "Buffalo in a Black Hills Preserve." (Nov. 21, 1927.)
  - (III) "And There Were in the Same Country Shepherds Abiding in the Fields, Keeping Watch over Their Flocks by Night." (Dec. 19, 1927.)
  - (III) "A Yak Caravan Waiting, To Be Loaded." (March 21, 1927.)
- Bays:**
- (III) "The Chesapeake Bay Country." (Feb. 13, 1928.)
- Birds:**
- (III) "A Gift More Prized than Turquoise by the Zuni." (May 2, 1927.)
  - (III) "Some Citizens of the Antarctic Continent." (penguins). (Jan. 16, 1928.)
- Caves:**
- (III) "Carlsbad Cavern Draws Many Visitors." (Dec. 12, 1927.)
- Earthquakes:**
- (III) "Monuments Built by Drops of Water in Carlsbad Cavern." (Dec. 12, 1927.)
  - (III) "Earthquake Crack in a Dike of Matsue Land, Japan." (March 28, 1927.)
  - (III) "Expedition To Study Alaskan Volcanoes and Earthquakes." (Nov. 21, 1927.)
  - (III) "Why Japan Has So Many Earthquakes." (March 28, 1927.)
- Fish:**
- (III) "Some Strange Kinds of Fishes." (Oct. 31, 1927.)
- Floods:**
- (III) "Distant Tributaries Help Make Lower Mississippi Floods." (Oct. 17, 1927.)
  - (III) "Evangeline's Eden in Louisiana Engulfed by Flood." (Oct. 17, 1927.)
  - (III) "Refugees on a Mount at Modoc, Arkansas." (May 16, 1927.)
  - (III) "Why the Mississippi Goes on a Rampage." (Mar. 16, 1927.)
- Flowers:**
- (III) "Selling Chile's National Flower, the Copihue." (Feb. 28, 1927.)
- Forests:**
- (III) "What an Amazon Tropical Forest Looks Like from a Hydroplane." (April 11, 1927.)
- Fowls:**
- (III) "The Leghorn Takes Its Name from Livorno, Italy." (Feb. 28, 1927.)
- Moon:**
- (III) "The Pull of the Moon, a Force That Flooded London." (Feb. 6, 1928.)
  - (III) "Why the Moon Raises Higher Tides than the Sun." (Feb. 20, 1928.)
  - (III) "Why There Are Tides on Both Sides of the Earth at the Same Time." (Feb. 13, 1928.)
- Mountains:**
- (III) "Cathedral Spires of the Black Hills as Viewed from Harney Peak." (Nov. 21, 1927.)
  - (III) "Mt. Fuji, the Inspiration for Many Japanese Artists." (Dec. 5, 1927.)
  - (III) "Mount Orizaba, 125 Miles Southeast of Mexico City." (March 21, 1927.)
- Plants and Trees:**
- (III) "Australia Plots to Recover 60 Million Acres Captured by the American Prickly Pear." (Feb. 13, 1928.)
  - (III) "A Forest of Plantation Rubber in the Straits Settlements." (Feb. 13, 1928.)
  - (III) "New Guinea, Where 'Bread' Grows Overhead." (Jan. 16, 1928.)
  - (III) "An Oil Palm Cone, Source of an Ingredient of American Soap." (Jan. 2, 1928.)
  - (III) "The Prickly Pear Is Not an Unwelcome Guest in Sardinia." (Feb. 13, 1928.)
  - (III) "Sorting Palms for American Straw Hats." (Oct. 17, 1927.)
  - (III) "To the Amazon Jungle the World Looked for Its Rubber Supply 20 Years Ago." (Feb. 13, 1928.)
  - (III) "A Year-Old Coffee Tree." (Jan. 16, 1928.)
- Poison:**
- (III) "The Mystery of Poison Darts in the Amazon Valley." (May 9, 1927.)
- Reptiles:**
- (III) "Alligators on the Bank of an Indian Lake." (Nov. 7, 1927.)
  - (III) "An Alligator Caught on the Magdalena River." (Nov. 28, 1927.)
- Rivers:**
- (III) "The Airplane on the Tagus River." (Nov. 21, 1927.)
  - (III) "Distant Tributaries Help Make Lower Mississippi Floods." (Oct. 17, 1927.)
  - (III) "St. Mary's River, Where the Maryland Colonists Landed." (Feb. 13, 1928.)
  - (III) "The Very Beginning of a River Valley." (Nov. 21, 1927.)
  - (III) "A Shark and His Deadhead Passenger." (Jan. 9, 1928.)
- Sharks:**
- (III) "Snails for Sale." (March 14, 1927.)
- Snails:**
- (III) "Bath, England, Honors Its Planner." (Jan. 9, 1928.)
- Springs:**
- (III) "Monuments Built by Drops of Water in Carlsbad Cavern." (Dec. 12, 1927.)
- Stalagmites:**
- (III) "The Pull of the Moon, a Force That Flooded London." (Feb. 6, 1928.)
  - (III) "Ships Chained Ashore in the Harbor of Clovelly, Cornwall." (Feb. 6, 1928.)
  - (III) "Why the Moon Raises Higher Tides than the Sun." (Feb. 20, 1928.)
  - (III) "An Automatic Tidal Indicator." (Feb. 20, 1928.)
  - (III) "Why There Are Tides on Both Sides of the Earth at the Same Time." (Feb. 13, 1928.)
- Vineyards:**
- (III) "Hesse is the Home of Famous Vineyards." (Jan. 2, 1928.)
- Volcanoes:**
- (III) "Expedition To Study Alaskan Volcanoes and Earthquakes." (Nov. 21, 1927.)
  - (III) "United States Own Biggest, and Least Harmful, Volcano Chain." (April 18, 1927.)
- Walrus:**
- (III) "Noo-Ka-Ping-Wa and His Harpoon Trophy." (Nov. 14, 1927.)
  - (III) "Rolling a Walrus onto a Rock at Low Tide." (May 16, 1927.)
- Waterfalls:**
- (III) "An Obscure and Isolated Wonder of the World: Kaieteur, British Guiana." (Jan. 23, 1928.)

- Canals:** "The Engineering Wonders of the World." (April 11, 1927.)  
 (I.) "The Garden of Eden' Hopes to Recover Reputation of Paradise with Irrigation Canals." (Jan. 2, 1928.)  
 (II.) "The Many Lakes Surrounding Mexico City Are Connected with the Capital by Canals." (Jan. 9, 1928.)
- Castles:** "Sinaia: Summer Home of Rumania's Boy King." (Oct. 17, 1927.)
- Ceremonies:** "Bath, England, Honors Its Planners." (Jan. 9, 1928.)  
 "The Most Important Day of the Year in Bruges." (May 2, 1927.)  
 "New Year Day Was Slave Emancipation Day in Sierra Leone Protectorate." (Jan. 2, 1928.)
- Chairs:** (III.) "Chairs and Soap in the Raw." (April 25, 1927.)
- Churches:** (III.) "Rome's Sea-going Hacks Drawn up in the Concourse of St. Peter's." (April 11, 1927.)
- Costumes:** (III.) "The Daughter of a Gypsy Queen." (Nov. 7, 1927.)  
 (III.) "The Devil Wears Skirts, According to the Tibetan Version." (Nov. 21, 1927.)  
 (III.) "Galician Peasants in Embroidered Leather Jackets." (Nov. 28, 1927.)  
 (III.) "More Men in the World Wear Skirts or Kimonos than Trousers." (Nov. 21, 1927.)  
 (III.) "Pathans from Afghanistan Have Populated Parts of Northwest India." (Feb. 20, 1928.)  
 (III.) "A Peasant Girl of Normandy." (Oct. 24, 1927.)  
 (III.) "A Sheath Gown in Caguan (Porto Rico)." (Oct. 17, 1927.)  
 (III.) "Sinaia Horsemen of Mexico Wear Leather Flaps To Protect Their Legs from Thorns." (May 2, 1927.)
- Dances:** (III.) "Folk-Dancing among the Csechs." (Oct. 24, 1927.)  
 (III.) "Tongot Native of the Philippines Rehearsing an Old-Time War Dance." (Jan. 16, 1928.)  
 (III.) "Maori Warriors Rehearsing a Haka, or War Dance." (April 11, 1927.)
- Diving:** (III.) "Up for Air: Note the Clamps on the Pearl Diver's Nose." (Feb. 6, 1928.)
- Fishing:** (III.) "A Catch of Menhaden: Another Picture Which Has a Long Geographic Story." (Jan. 2, 1928.)  
 (III.) "A One-Horsepower Machine for Hauling in a Maryland Shad Seine." (Jan. 2, 1928.)  
 (III.) "Where Isak Walton Fished and Wrote Fine Prose." (Dec. 12, 1927.)
- Flags:** (Diagram.) "Flags of British Dominions." (Dec. 5, 1927.)  
 (III.) "South Africa Adds to the Array of British Flags." (Dec. 5, 1927.)
- Flute:** (III.) "A Shepherd of Bethlehem Piping on His Handmade Flute." (Dec. 19, 1927.)
- Geographic Magazines:** "Using The Geographic in the Classroom." (Jan. 2, 1928.)
- Hacks:** (III.) "Rome's Sea-going Hacks Drawn up in the Concourse of St. Peter's." (April 11, 1927.)
- Harbors:** "Amoy: Where Boston's 'Tea Party' Ship Came From." (April 18, 1927.)  
 "Cuba: Host to President Coolidge, Lindbergh and Pan American Conference." (Jan. 30, 1928.)  
 "Vigo: Port of Spanish Armadas of Commerce." (March 7, 1927.)
- History:** "Evangeline's 'Eden in Louisiana' Engulfed by Flood." (Oct. 17, 1927.)  
 (III.) "Historical Shrines of United States and Canada in France." (Dec. 12, 1927.)  
 "Iraq, Traditional Garden of Eden, Has Modern Ambitions." (Jan. 2, 1928.)  
 "The Nine Capitals of the United States." (Jan. 30, 1928.)  
 (III.) "Sketch Map Showing Home Towns of Champlain, Jacques Cartier, La Salle, and Other French Explorers Who Have Figured in American History." (Dec. 12, 1927.)  
 (III.) "St. Mary's River, Where the Maryland Colonists Landed." (Feb. 13, 1928.)  
 (III.) "U. S. Frigate 'Constitution' Popularly Known as 'Old Ironsides.'" (May 16, 1927.)  
 "William the Conqueror, Founder of the English Language Empire." (Oct. 24, 1927.)
- Hospitals:** (III.) "Dr. Wilfred T. Grenfell and Miss Ferris, A Graduate Nurse in Charge of the International Grenfell Hospital at Porteau Bay." (March 28, 1927.)
- Houses:** "A Refugee Home in Macedonia." (May 16, 1927.)  
 (III.) "The Typical Thick-Walled, Thatch-Roofed Country House of the Azorean Peasant: Note the Corn Stack to the Left." (Nov. 7, 1927.)
- Hunting:** (III.) "How They Hunt Bengal's Namesake Beast." (Jan. 2, 1928.)
- Huts:** (III.) "Post Office on the Road to Kabul." (Feb. 20, 1928.)
- Languages:** "New Guinea: Where 'No Tikkee, No Washee, May Be Good English.'" (Jan. 16, 1928.)  
 "Northern Italy One of Europe's Language Battle Areas." (Oct. 24, 1927.)  
 "The Spanish-Speaking World." (Oct. 17, 1927.)  
 "William the Conqueror, Founder of the English Language Empire." (Oct. 24, 1927.)
- Manners and Customs:** "Borneo: Where Head-Hunting Still Survives." (April 25, 1927.)  
 "Getting Acquainted with French Railroad Trains." (Feb. 20, 1928.)  
 (III.) "Milk on the Hoof in Seville." (April 11, 1927.)  
 (III.) "Table Manners in the Arctic." (May 16, 1927.)  
 "Tipping: A Custom That Varies the World Over." (Nov. 21, 1927.)  
 (III.) "Wash Day on a Belgian Canal Barge." (April 11, 1927.)
- Maps and Diagrams:** "Distant Tributaries Help Make Lower Mississippi Floods." (Oct. 17, 1927.)  
 "Flags of British Dominions." (Dec. 5, 1927.)  
 "A Map of Asia Minor and the Holy Land." (Oct. 31, 1927.)  
 "A Map of Cuba and the Neighboring Bahama Islands." (Jan. 30, 1928.)  
 "Map of the Republic of Colombia." (Nov. 28, 1927.)  
 "Map Showing How Well Old World Is Known." (Nov. 7, 1927.)  
 "The New and Old Boundaries of Labrador." (April 4, 1927.)  
 "An Outline Map of the Provinces of France." (Nov. 14, 1927.)  
 "Parts of Both Americas Still Await a Columbus To Explore Them." (Nov. 7, 1927.)  
 "Routes Followed by Lieut. John A. Macready and Lieut. Oakley G. Kelly in Their Transcontinental, Non-stop Flights, and of Lieut. Macready and Lieut. A. W. Stevens on their later Photographic Flights." (April 18, 1927.)  
 "Sketch Map Showing Home Towns of Champlain, Jacques Cartier, La Salle, and Other French Explorers Who Have Figured in American History." (Dec. 12, 1927.)  
 "Sketch Map Showing the Size and Position of Corsica in Relation to the Mother Country." (Oct. 24, 1927.)  
 "The West Coast of Mexico." (May 2, 1927.)
- Markets:** "Agora: The Shopping District of Ancient Athens." (March 14, 1927.)  
 "Baguio: One Residence of the New Governor of the Philippines." (Jan. 16, 1928.)
- Mosques:** "Medina Connected with Mecca by Bus Line." (Jan. 9, 1928.)
- Music:** "Bayreuth, the City That Music Made." (Oct. 31, 1927.)
- Names, Geographical:** "Llanfairpwllgwyngyllgogerychwyrndrobwllllandsylllogogoch." (Feb. 28, 1927.)  
 "The Most Popular Geographic Names." (March 14, 1927.)  
 "The Mystery of the Wandering Gypsy." (Nov. 7, 1927.)
- Ox Carts:** (III.) "Ox Carts on a Mexican Road." (March 28, 1927.)
- Parks:** (III.) "As the Airman Sees the American Falls at Niagara." (April 18, 1927.)  
 "The Black Hills: Farthest West President's Summer Home." (Nov. 21, 1927.)  
 "Our State Park Systems." (April 18, 1927.)
- Pests:** "Australia Plots to Recover 60 Million Acres Captured by the American Prickly Pear." (Feb. 13, 1928.)
- Pilgrimages:** (III.) "Pilgrims Encamped Outside Mecca." (Jan. 9, 1928.)
- Plows:** (III.) "A Primitive Wooden Plow Is Used by Some Latvian Farmers." (April 4, 1927.)
- Races and Tribes:** (III.) "The Daughter of a Gypsy Queen." (Nov. 7, 1927.)  
 (III.) "Every Day is a School Holiday in Northern Rhodesia." (Nov. 28, 1927.)  
 (III.) "Galician Peasants in Embroidered Leather Jackets." (Nov. 28, 1927.)  
 (III.) "A Haitian Woman Riding Side Saddle." (Feb. 6, 1928.)  
 (III.) "How To Dress the Hair in Southeast Uganda." (Dec. 19, 1927.)  
 "The Ibo of Nigeria, Who Help Supply Us With Chocolate." (Jan. 23, 1928.)  
 (III.) "Tongot Native of the Philippines Rehearsing an Old-Time War Dance." (Jan. 16, 1928.)  
 (III.) "Mexican School Boys and Girls Were Excused from Classes to Welcome Lindbergh." (Jan. 9, 1928.)

# POPULAR SCIENCE

- Architecture:** (III.) "Moorish and Spanish Architecture Has Become Popular in the United States." (Dec. 19, 1927.)
- Astronomy:** (III.) "An Automatic Tidal Indicator." (Feb. 20, 1928.)  
 "The Pull of the Moon, a Force That Helped Flood London." (Feb. 6, 1928.)  
 "Why the Moon Raises Higher Tides than the Sun." (Feb. 20, 1928.)  
 "Why There Are Tides on Both Sides of the Earth at the Same Time." (Feb. 13, 1928.)
- Aviation:** "The Airplane on the Tagus River." (Nov. 21, 1927.)  
 (III.) "Airplane View of Amsterdam: The New York of Holland." (Oct. 31, 1927.)  
 (III.) "An Airplane Flying above the Clouds." (Oct. 17, 1927.)  
 (III.) "The Hydroplane Reveals an Indian Hut Concealed in the Dense Jungle of the Amazon Valley Tropical Forests." (April 11, 1927.)  
 "Mankind's Quickest Conquest, That of the Air." (Oct. 17, 1927.)  
 "Seaplanes To Bring Hobart, Tasmania, 12 Hours Nearer Australia." (March 7, 1927.)  
 "The Reasons for the Routes of Lindbergh and Byrd." (Oct. 24, 1927.)  
 (Map.) "Routes Followed by Lieut. John A. Macready and Lieut. Oakley G. Kelly in their Transcontinental, Non-stop Flights, and of Lieut. Macready and Lieut. A. W. Stevens on Their Later Photographic Flights." (April 18, 1927.)  
 "They Did It Alone." (Nov. 28, 1927.)  
 "What an Amazon Tropical Forest Looks Like from a Hydroplane." (April 11, 1927.)  
 "Why Aviators Must Wait on the Weather." (April 18, 1927.)  
 (III.) "The Famous Arc de Triomphe in Paris Beneath Which Is the Tomb of France's Unknown Soldier." (Feb. 20, 1928.)  
 "Why Bogota Gives Thanks for the Airplane." (Nov. 28, 1927.)  
 (III.) "The Wright Glider at Kitty Hawk, North Carolina, in 1902." (Oct. 17, 1927.)
- Chemistry:** "Hues of 1928 Automobiles Are Products of Corn, Cotton and Coal Tar." (Jan. 30, 1928.)
- Education:** (III.) "Bokhara Students of the Koran." (Nov. 28, 1927.)
- Engineering:** (III.) "The Engineering Wonders of the World." (April 18, 1927.)  
 (III.) "The Viaduct across the Tunkhannock, in Pennsylvania." (Jan. 16, 1928.)
- Expeditions:** "Commander Byrd Tells of Plans for Antarctic Explorations." (Nov. 21, 1927.)  
 "Expedition To Study Alaskan Volcanoes and Earthquakes." (Nov. 21, 1927.)  
 "A Gift More Prized than Turquoise by the Zuni." (May 2, 1927.)  
 (III.) "Halted by Fog and Pack Ice in Melville Bay." (March 21, 1927.)  
 "A Landlubber Goes Exploring." (March 21, 1927.)  
 (III.) "Where Stanley Met Livingstone at Ujiji." (Nov. 28, 1927.)
- Hydroplanes:** (III.) "Indians Inspecting a Hydroplane on a Tributary of the Amazon." (April 11, 1927.)
- Irrigation:** "American Towns below Sea Level." (March 21, 1927.)  
 (III.) "Digging for Water in Lower California: Mexico." (Jan. 23, 1928.)  
 "Iceland To Heat House of Parliament with Hot Springs." (March 7, 1927.)
- Mines:** "Galicia: Where Poland's Growing Pains Can Often Be Located." (Nov. 28, 1927.)
- Radio:** (III.) "A Pittsburgh Concert by Radio Received 2,000 Miles up the Amazon River." (May 9, 1927.)
- Railroads:** "Getting Acquainted with French Railroad Trains." (Feb. 20, 1928.)  
 "New Rail Link Opens up West Coast Mexico." (May 2, 1927.)
- Rays:** "Flying Messengers from the World of Atoms." (April 25, 1927.)  
 "What Rays Do for Us." (May 9, 1927.)
- Sanitation:** "How Swatting the Mosquito Brings Prosperity in Macedonia." (May 16, 1927.)
- Taxes:** "Odd Ways to Pay Taxes." (March 21, 1927.)
- Transportation:** (III.) "A Buffalo-Drawn Disk-Wheel Cart of Anatolia." (April 18, 1927.)  
 "New Airplane Route, Will Penetrate to the Isolated Capital of Afghanistan." (Feb. 20, 1928.)  
 (III.) "A Steam Engine That Climbs up Mount Snowdon." (Feb. 28, 1927.)



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## AN AMERICAN MOGUL ENGINE

A locomotive of this size would attract much attention in France where engines about half as large are in constant use. Geography has played its part in making French railroad equipment different from that of America. Heavy grades which American engines must pull are not so prevalent in France. Because the producers are close to markets or seaports they have not needed large freight cars or long trains and consequently France does not order huge locomotives (see Bulletin No. 2).

